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the  
university of Illinois  
college of engineering  
1960 GRADUATES  
10 years later  
where are they  
now?



# te ten ten ten ten



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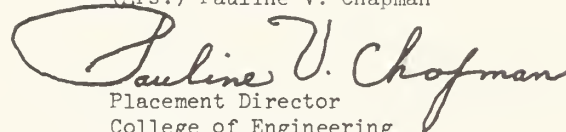
Ten years after graduation from college is an important milestone in the career of an engineer. By that time the uncertainties of the first few years have been reconciled and, in most cases a career pattern has been established.

The information in the following report covers the 1960 graduates of the College of Engineering at the University of Illinois at Urbana.

We are sorry for the delay in getting the completed report to the graduates who furnished us with the information which made it possible to complete the report. There were many delays and circumstances conspired to make an earlier publication date impossible. We thank each and every one of the graduates for their participation and their patience.

It is our hope that the following information will be both interesting and helpful.

(Mrs.) Pauline V. Chapman

A large, elegant handwritten signature in dark ink, reading "Pauline V. Chapman". The signature is written in a cursive style with a large, looping initial "P".

Placement Director  
College of Engineering  
University of Illinois  
Urbana, Illinois



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TEN-YEAR SALARY PROGRESS OF ENGINEERING GRADUATES WHO RECEIVED A B.S. DEGREE IN 1960

	Number of Questionnaires Sent	Number of Questionnaires Returned	Percent of Return	Military Service	Currently in Graduate Colleges	Unemployed	Employed	Average Monthly Salary 1970	High Monthly Salary 1970	Low Monthly Salary 1970	Average Starting Salary 1960	Percent of Increase 1960-1970
All Engineers	658 <sup>1</sup>	431	65.50%	2.32% 10	.93% 4	.23% 1	96.52% 416	\$1416.	\$5000. <sup>3</sup>	\$ 550. <sup>3</sup>	\$532.	166.17% <sup>2</sup>
Aero. E.	43	28	65.12%	1	1	1	25	1487.	3500.	1110.	545.	172.84%
Ag. E.	19	16	84.21%	-	-	-	16	1147.	1508.	550.	484.	136.98%
Ceram. E.	16	13	81.25%	-	-	-	13	1366.	1800.	935.	536.	154.85%
Civil E.	107	79	73.83%	3	1	-	75	1370.	3000.	865.	500.	174.00%
E. E.	215	132	61.40%	2	1	-	129	1458.	3750.	850.	549.	165.57%
E. Mech.	8	8	100.00%	-	-	-	8	1594.	2000.	1300.	489.	225.97%
E. Physics	41	25	60.98%	2	-	-	23	1422.	2835.	833.	624.	127.88%
G. E.	26	20	76.92%	1	-	-	19	1550.	2900.	940.	505.	206.93%
I. E.	22	14	63.64%	-	-	-	14	1288.	1500.	1000.	545.	136.33%
M. E.	142	83	58.45%	-	-	-	83	1412.	5000.	900.	521.	171.01%
Met. E.	12	9	75.00%	-	1	-	8	1391.	2000.	1088.	519.	168.02%
Min. E.	7	4	57.14%	1	-	-	3	1188.	1350.	1000.	495.	140.00%

<sup>1</sup>14 completed forms arrived too late to be included in report and 10 were returned for incorrect address

<sup>2</sup>Increase in starting salaries: 1960 to 1970 - 63.39%

<sup>3</sup>Highest salary - \$5000.00 graduate is a stock broker, employed by a large brokerage firm; lowest salary - \$550.00 is a self-employed farmer

SALARY COMPARISON FIGURES OF THOSE GRADUATES WHO HAVE COMPLETED AN ADVANCED DEGREE SINCE 1960 AND THOSE WHO HAVE NOT

	Total Employed	No Advanced Degree	M.S. in Original Field	M.S. in Other Technical Field	M.S. in Non- Technical Field	Ph.D. in Original Field	Ph.D. in Other Technical Field	M.B.A.	Law	Other
All Engineers Average Salary	416	265 \$1374.	61 <sup>1</sup> \$1468.	23 <sup>1</sup> \$1483.	6 <sup>1</sup> \$1186.	22 <sup>1</sup> \$1462.	8 <sup>1</sup> \$1428.	20 <sup>1</sup> \$1661.	5 <sup>1</sup> \$2000.	6 <sup>2</sup> \$1226.
Aero. & Astro. Eng. Average Salary	25	11 1499.	8 1606.	4 1459.	- -	1 1150.	- -	1 1500.	- -	- -
Agricultural Eng. Average Salary	16	10 1022.	2 1292.	1 1270.	- -	2 1382.	- -	1 1508.	- -	- -
Ceramic Eng. Average Salary	13	7 1253.	- -	2 1287.	- -	2 1550.	- -	1 1510.	1 1800.	- -
Civil Eng. Average Salary	75	50 1304.	11 1478.	3 1628.	- -	2 1383.	2 1675.	3 1961.	1 1100.	3 1315.
Electrical Eng. Average Salary	129	78 1434.	28 1415.	3 1540.	2 1219.	8 1594.	- -	6 1866.	1 1500.	3 1137.
Eng. Mechanics Average Salary	8	- -	4 1657.	1 1408.	- -	2 1605.	1 900.	- -	- -	- -
Eng. Physics Average Salary	23	12 1563.	- -	4 1287.	- -	3 1183.	4 1315.	- -	- -	- -
General Eng. Average Salary	19	13 1365.	- -	1 2900.	1 1300.	- -	- -	3 1633.	1 2600.	- -
Industrial Eng. Average Salary	14	10 1274.	1 1500.	1 1450.	1 1100.	- -	- -	1 1250.	- -	- -
Mechanical Eng. Average Salary	83	68 1378.	6 1477.	3 1339.	2 1140.	- -	1 1917.	2 1695.	1 3000.	- -
Metallurgical Eng. Average Salary	8	5 1431.	- -	- -	- -	2 1441.	- -	1 1088.	- -	- -
Mining Eng. Average Salary	3	1 1350.	1 1215.	- -	- -	- -	- -	1 1000.	- -	- -

<sup>1</sup>Of the 151 who completed an advanced degree, 73 (48.34%) completed the degree as a full-time student, 78 (51.66%) as a part-time student while employed.

<sup>2</sup>3 no degree indicated, 2 M.S. in Education, 1 M.S. in Public Works.



## 1960 GRADUATES PRESENTLY EMPLOYED AND WORKING ON ADVANCED DEGREES

	Total Working on Advanced Degrees	M.S. in Original Field	M.S. in Other Technical Field	M.S. in Non- Technical Field	Ph.D. in Original Field	Ph.D. in Other Technical Field	M.B.A.	Law	Other
All Engineers	50	6	7	6	1	3	25	1	1 <sup>1</sup>
Aero. & Astro. Eng.	1	-	-	-	-	1	-	-	-
Agricultural Eng.	1	-	1	-	-	-	-	-	-
Ceramic Eng.	-	-	-	-	-	-	-	-	-
Civil Eng.	5	-	-	2	-	-	2	-	1
Electrical Eng.	18	4	2	1	1	1	9	-	-
Eng. Mechanics	-	-	-	-	-	-	-	-	-
Eng. Physics	3	-	2	-	-	1	-	-	-
General Eng.	6	-	1	-	-	-	5	-	-
Industrial Eng.	1	1	-	-	-	-	-	-	-
Mechanical Eng.	13	1	1	2	-	-	8	1	-
Metallurgical Eng.	1	-	-	-	-	-	1	-	-
Mining Eng.	1	-	-	1	-	-	-	-	-

<sup>1</sup>M.S. Public Administration

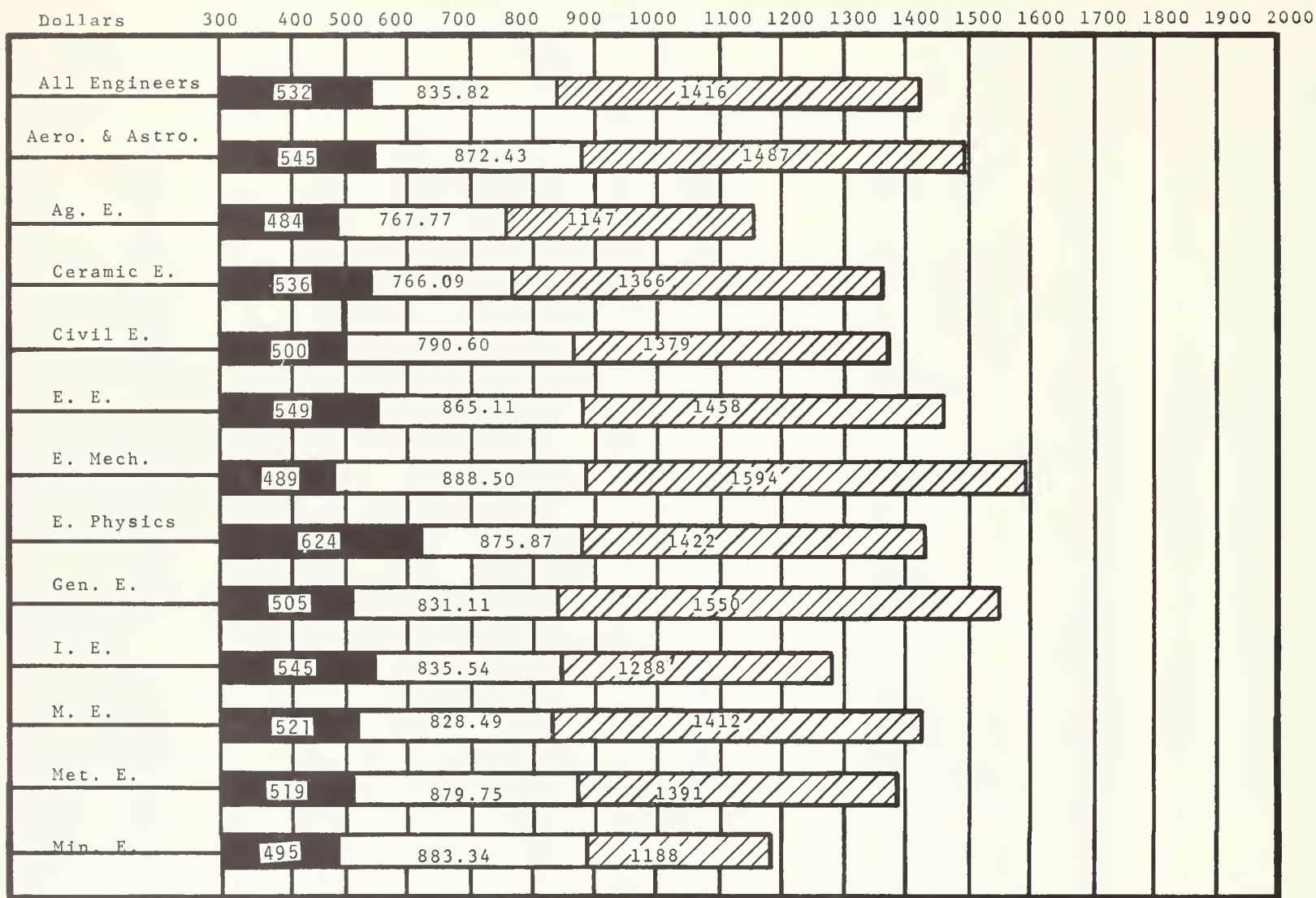
## CORRELATION BETWEEN SCHOLASTIC AVERAGE AND FINANCIAL PROGRESS 1960-1970

	Total Employed	1st Decile 5.000 - 4.370	2nd Decile 4.369 - 4.105	3rd Decile 4.104 - 3.946	4th Decile 3.945 - 3.789	5th Decile 3.788 - 3.637	6th Decile 3.636 - 3.518	7th Decile 3.517 - 3.410	8th Decile 3.409 - 3.304	9th Decile 3.303 - 3.183	10th Decile 3.182 & below
All Engineers	416	42 \$1575.	42 \$1406.	42 \$1339.	41 \$1441.	41 \$1503.	41 \$1329.	41 \$1418.	42 \$1429.	42 \$1327.	42 \$1395.
Aero. & Astro. Eng.	25	6 1834.	2 1370.	1 1454.	2 1396.	6 1474.	2 1325.	2 1325.	- -	1 1110.	3 1312.
Agricultural Eng.	16	2 1330.	4 1318.	1 550.	3 1197.	- -	1 1080.	- -	2 983.	1 1200.	2 1020.
Ceramic Eng.	13	1 1510.	2 1435.	- -	1 1104.	1 1355.	2 1500.	1 1225.	1 1324.	2 1118.	2 1568.
Civil Eng.	75	7 1703.	3 1328.	7 1211.	8 1499.	9 1376.	8 1419.	11 1243.	7 1460.	6 1187.	9 1298.
Electrical Eng.	129	14 1536.	10 1521.	17 1345.	10 1421.	8 1356.	11 1310.	14 1602.	16 1543.	14 1459.	15 1375.
Eng. Mechanics	8	2 1543.	- -	2 1664.	1 1300.	1 2000.	2 1522.	- -	- -	- -	- -
Eng. Physics	23	2 1350.	8 1313.	5 1418.	2 1485.	3 1750.	2 1390.	- -	1 1425.	- -	- -
General Eng.	19	1 1200.	1 1400.	- -	3 2067.	1 2900.	2 1120.	- -	5 1483.	5 1339.	1 1400.
Industrial Eng.	14	1 1500.	- -	- -	1 1400.	3 1358.	1 1265.	5 1187.	- -	2 1425.	1 1018.
Mechanical Eng.	83	6 1511.	11 1427.	7 1229.	8 1273.	9 1551.	9 1284.	6 1583.	9 1292.	10 1311.	8 1739.
Metallurgical Eng.	8	- -	1 1400.	1 1483.	2 1667.	- -	1 1088.	2 1363.	- -	- -	1 1100.
Mining Eng.	3	- -	- -	1 1215.	- -	- -	- -	- -	1 1350.	1 1000.	- -

# RANGE OF 1970 SALARIES OF 1960 ENGINEERING GRADUATES

The monthly salaries are divided according to the degree held in 1970.

B.S. Degree		Salary	Total	Salary	Total	Salary	Total	Salary	Total	Ph.D. Degree		Salary	Total
		\$1473	1	\$1275	1	\$1030	1	\$1470	1			\$1600	1
Salary	Total	1472	1	1270	1	1021	1	1460	2	Salary	Total	1510	1
\$5000	1	1470	1	1265	1	1018	1	1454	1	\$1917	1	1508	1
3750	1	1467	1	1262	1	1000	9	1450	1	1830	1	1500	2
3500	1	1460	2	1260	2	989	1	1445	1	1803	1	1330	1
2835	1	1450	3	1250	12	980	2	1439	1	1700	3	1300	1
2333	1	1440	1	1240	2	975	1	1425	1	1666	1	1250	1
2330	1	1435	1	1225	4	965	1	1417	1	1650	1	1240	1
2300	1	1433	2	1217	1	950	1	1415	1	1635	1	1088	1
2200	3	1430	3	1215	1	940	1	1408	1	1630	1	1000	1
2170	1	1425	4	1211	1	935	1	1404	1	1600	2		20
2100	1	1423	1	1210	1	900	1	1400	7	1575	1		
2081	1	1415	1	1209	1	550	1	1394	1	1500	2		
2080	1	1405	1	1207	1		265	1385	1	1483	1	Law Degree	
2000	2	1400	14	1200	18			1375	1	1470	1		
1923	1	1393	1	1195	1			1360	1	1458	1	Salary	Total
1865	1	1392	2	1192	1	M.S. Degree		1350	1	1450	1	\$3000	1
1850	1	1385	1	1185	1			1333	3	1400	2	2600	1
1750	2	1380	3	1175	3	Salary	Total	1327	1	1295	1	1800	1
1735	1	1375	3	1160	2	\$3000	1	1325	1	1266	1	1500	1
1733	1	1365	1	1159	1	2900	1	1300	10	1200	2	1100	1
1720	1	1362	1	1156	1	2400	1	1285	1	1150	1		5
1700	2	1360	1	1150	2	2000	3	1270	1	1100	1		
1670	1	1359	1	1140	1	1860	1	1250	1	1000	1		
1667	1	1358	1	1133	1	1850	2	1245	1	900	1	Other	
1650	2	1355	1	1125	4	1800	1	1221	1	833	1		
1635	1	1350	4	1120	2	1772	1	1215	1		30	Salary	Total
1610	1	1346	1	1110	1	1700	2	1210	1			\$1550	1
1600	3	1344	1	1105	3	1690	1	1200	2			1400	1
1586	1	1340	3	1100	10	1670	1	1191	1	M.B.A. Degree		1333	1
1583	1	1335	2	1090	1	1665	1	1190	1			1213	1
1580	1	1334	1	1085	3	1640	1	1185	1	Salary	Total	1011	1
1565	1	1333	1	1080	2	1630	1	1180	2	\$2583	1	850	1
1550	3	1331	1	1073	1	1600	2	1167	1	2250	1		6
1536	1	1330	2	1068	1	1585	1	1104	1	2150	1		
1530	1	1324	1	1066	1	1541	1	1100	1	2083	1		
1512	1	1320	1	1060	1	1533	1	1000	2	2000	1		
1511	1	1302	1	1048	1	1530	1	1001	1	1983	1		
1500	10	1300	14	1042	1	1500	3	980	1	1850	1		
1478	1	1290	1	1040	1	1485	1	865	1	1800	1		
1475	1	1280	2	1037	1	1473	1		90	1700	1		



At graduation-1960      After 5 years-1965      After 10 years-1970



AVERAGE MONTHLY SALARIES

JOB CHANGES SINCE 1960

				No Change			One Change			Two Changes			Three Changes			Four or More Changes	
Total Percent of Change		Total Employed	Number	Percent of Change	Salary	Number	Percent of Change	Salary	Number	Percent of Change	Salary	Number	Percent of Change	Salary	Number	Percent of Change	Salary
58.65%	All Engineers	416	172	41.34%	\$1412.	114	27.41%	\$1440.	92	22.11%	\$1398.	31	7.45%	\$1411.	7 <sup>1</sup>	1.68%	\$1386.
68.00%	Aero E.	25	8	32.00%	1418.	8	32.00%	1600.	7	28.00%	1354.	2	8.00%	1775.	-	-	-
50.00%	Ag. E.	16	8	50.00%	1276.	7	43.75%	1020.	-	-	-	1	6.25%	1000.	-	-	-
61.54%	Ceram. E.	13	5	38.46%	1436.	5	38.46%	1385.	3	23.08%	1217.	-	-	-	-	-	-
62.67%	Civil E.	75	28	37.33%	1341.	25	33.33%	1460.	14	18.68%	1306.	14	5.33%	1347.	4	5.33%	1259.
57.36%	E. E.	129	55	42.64%	1495.	27	20.93%	1317.	35	27.13%	1464.	12	9.30%	1586.	-	-	-
75.00%	Eng. Mech.	8	2	25.00%	1467.	5	62.50%	1682.	-	-	-	1	12.50%	1408.	-	-	-
43.48%	Eng. Physics	23	13	56.52%	1510.	5	21.74%	1357.	2	8.70%	1340.	3	13.04%	1204.	-	-	-
52.63%	Gen. E.	19	9	47.38%	1546.	4	21.05%	1811.	4	21.05%	1441.	1	5.26%	1120.	1	5.26%	1400.
64.29%	I. E.	14	5	35.71%	1250.	2	14.29%	1330.	7	50.00%	1304.	-	-	-	-	-	-
60.24%	M. E.	83	33	39.76%	1320.	25	30.12%	1560.	17	20.48%	1394.	6	7.23%	1274.	2	2.41%	1633.
25.00%	Met. E.	8	6	75.00%	1338.	1	12.50%	1100.	1	12.50%	2000.	-	-	-	-	-	-
100.00%	Mining E.	3	-	-	-	-	-	-	2	66.67%	1282.	1	33.33%	1000.	-	-	-

<sup>1</sup>4 made 4 changes - average salary \$1491.  
3 made 5 changes - average salary \$1245.



## REASONS FOR CHANGING POSITIONS

Some combining of reasons has been attempted but in order to bring out as many dissatisfactions as possible the following list resulted. Some respondents listed more than one reason; others gave no reason even though one was requested.

### REASONS INVOLVING ACTUAL WORK

40 better opportunity  
 34 better position  
 20 opportunity for advancement  
 17 better job offer  
 17 dissatisfied with job  
 15 few advancement possibilities  
 14 to broaden experience  
 13 more responsibility  
 12 no interest in work  
 11 lack of challenging work  
 6 transferred  
 5 lack of security  
 4 not enough to do  
 4 to enter private industry  
 4 to move into marketing  
 4 to work in field originally trained for  
 3 to go into teaching  
 3 enter law practice  
 3 offer of management position  
 2 projects were too long in development  
 2 return to research situation  
 2 no future  
 2 work diversification  
 2 dissatisfaction with future career responsibilities  
 2 too much travel  
 1 to become director of planning in small metropolitan area  
 1 excessive overtime  
 1 to fly for another company  
 1 wanted space work  
 1 to enter consulting business  
 1 wanted a change  
 1 static in position  
 1 wanted to leave academic environment  
 1 job phased out  
 1 not employed to my capacity  
 1 offered permanent Civil Service position

1 dissolved sales department - subsidiary incorporated by parent company  
 1 opportunity to set up and manage sales development department  
 1 work too production oriented  
 1 to move to engineering management  
 1 return to manufacturing management  
 1 offered work in specialty not compatible with promotion  
 1 to go in construction field  
 1 moved from engineering to computer programming  
 1 to obtain job in commercial data processing equipment design  
 1 opportunity to start I.E. department in small company

### REASONS INVOLVING THE COMPANY

41 more money  
 27 laid-off  
 5 dissatisfied with company management  
 5 company folded  
 5 ethics of management  
 4 company sold  
 4 company on downgrade  
 4 company phased out department  
 3 fired  
 3 dissatisfied with company  
 2 better growth opportunity  
 2 chance to work with small company  
 2 lack of cooperation  
 2 job misrepresented by company  
 1 management change  
 1 wage practices policy introduced - raises not on merit  
 1 change in product emphasis

(Cont'd.)



## REASONS FOR CHANGING POSITIONS (continued)

### REASONS INVOLVING THE COMPANY (continued)

- 1 lack of research possibilities - could not advance without Ph.D.
- 1 sales force combined with that of another company
- 1 city was politically unstable in area of employment
- 1 company personnel
- 1 to join a larger company
- 1 disagreements resulting from decreased work load caused by disappointed customers
- 1 company inability to use present day technology to compete efficiently with overseas manufacturers
- 1 to leave Government employment
- 1 company politics prevented technical developments requiring more than six months
- 1 personal conflict with administration

### REASONS INVOLVING LOCATION

- 14 location
- 10 to return to Midwest
- 5 company relocated - was not willing to move
- 4 to move to California

- 3 did not like living in Chicago
- 3 to seek better climate
- 2 to return to Chicago
- 2 return to the U.S.
- 1 bad weather
- 1 wife accepted a job in New York - moved
- 1 wanted smaller town
- 1 desire to travel all over the world
- 1 to teach in Australia
- 1 to move to Florida
- 1 went to Europe
- 1 opportunity to work in Japan

### PERSONAL REASONS

- 37 to return to school
- 9 entered military service
- 9 to own and operate own business
- 3 personal problems
- 2 medical reasons
- 1 wanted a vacation
- 1 to get married
- 1 personal commuting
- 1 too many small children while on a sales job

THE 416 RESPONDING, EMPLOYED 1960 GRADUATES ARE NOW EMPLOYED BY THE FOLLOWING COMPANIES

A and H Engineering Corporation	1 C.E.
Abbott Laboratories	1 M.E.
Acco-Bristol Company	1 M.E.
Aerojet Solid Propulsion Company	1 M.E.
Aerospace Corporation	1 A.A.E., 1 C.E.
AIL Information Systems	1 E.E.
Air-Oil Products Company	1 M.E.
Allis Chalmers Corporation	1 E.E.
Aluminum Company of America	1 G.E.
American Information Development Company	1 E.E.
American Cryogenics, Incorporated	1 M.E.
Amron-Antigo	1 Met.E.
Analog Devices	1 E.E.
Analog Digital Systems, Incorporated	1 E.E.
Anchor Hocking Glass Company	1 G.E.
Arthur Anderson Company	1 C.E.
H. Ray Anderson & Associates	1 C.E.
Apex Tool Works, Incorporated	1 E.M.
Argonne National Laboratory	1 E.E.
Arizona State University	1 Met.E.
Armco Steel Corporation	1 Met.E.
T. L. Arzt Foundry Company	1 I.E.
The Autobahn	1 M.E.
Automatic Electric Company	3 E.E.
Avco Corporation	1 A.A.E., 1 E.E.
Barton-Aschman Associates	1 C.E.
Basic Ceramics, Incorporated	1 Ceram. E.
Battelle Development Corporation	1 Ceram. E.
Battelle Memorial Institute	1 A.A.E., 1 E.E., 1 M.E.
Bechtel Corporation	1 C.E.
Bell & Gossett	1 M.E.
Bell & Howell	2 E.E.
Bell System: (21)	
A.T. & T. Long Lines	1 G.E., 1 E.E., 1 M.E.
Bell Laboratories	6 E.E., 2 E.P.
Illinois Bell	1 C.E., 1 E.E.
Sandia Corporation	1 C.E.
Teletype Corporation	1 E.E., 1 I.E., 1 M.E.
Western Electric Company	3 M.E., 1 E.E.
Bendix Corporation	1 M.E.
Birch, Swindler, McKie & Beckett	1 A.A.E.
Bituminous Fuel & Oil Company	1 C.E.
Black Brothers, Incorporated	1 Ag.E.

Bodine Electric Company  
 Boeing Company  
 Bohn Manufacturing Company  
 Bourns/CAI, Incorporated  
 Buckeye Cellulose Corporation  
 Bunker Ramo Corporation  
 Burlington Northern, Incorporated  
 Burroughs Corporation  
 California Computer Products Company  
 California Division of Highways  
 Carrier Corporation  
 J. I. Case Company  
 Caterpillar Tractor Company  
 Central Illinois Public Service Company  
 Cherry Burrell Corporation  
 Chevron Oil Company  
 Chicago Bridge & Iron Company  
 Chicago Metropolitan Sanitary District  
 Chicago Rawhide Company  
 Chicago Title & Trust Company  
 Chrysler Corporation  
 Cities Service Oil Company  
 City of Berlin, Wisconsin  
 City of Chattanooga  
 City of Denver  
 City of Indianapolis  
 City of Oak Park, Michigan  
 Clow Corporation  
 Collins Radio  
 Collins Rice Incorporated  
 Combustion Engineering Company  
 Commonwealth Edison Company  
 Continental Can Company  
 Continental Oil Company  
 Control Data Corporation  
 Cook Electric Company  
 Cooper Bessemer  
 Craig Cutten & Associates  
 Cummins Engine Company  
 Cunningham Limp Company  
 Cutler-Hammer Company  
 Dalmo Victor Company  
 Dana Laboratories  
 DMG Company, Incorporated

1 Mining E.  
 1 A.A.E., 1 Ceram. E., 2 E.E.  
 1 M.E.  
 1 M.E.  
 1 G.E.  
 1 E.E.  
 1 C.E.  
 1 E.E., 1 E.P.  
 1 G.E.  
 2 C.E.  
 1 M.E.  
 1 Ag.E., 1 M.E.  
 2 Ag.E., 1 C.E., 1 I.E., 2 M.E., 1 Met.E.  
 1 M.E.  
 1 M.E.  
 1 C.E.  
 1 E.E.  
 2 C.E.  
 1 E.P.  
 1 C.E.  
 1 G.E.  
 1 C.E.  
 1 C.E.  
 1 C.E.  
 1 C.E.  
 1 E.E.  
 1 C.E.  
 1 G.E.  
 1 E.E., 1 I.E.  
 1 C.E.  
 1 Ceram. E.  
 1 E.E.  
 2 A.A.E., 1 M.E.  
 1 M.E.  
 1 E.P., 1 I.E.  
 1 E.E.  
 1 Mining E.  
 1 G.E.  
 1 M.E.  
 1 C.E.  
 1 M.E.  
 1 E.E.  
 1 E.P.  
 1 M.E.

R. R. Donnelley Company	1 G.E.
Dravo Corporation	1 C.E.
E. I. Du Pont Company	1 E.E., 2 M.E.
Eagle Signal Company	1 E.E.
Effects Technology, Incorporated	1 E.M.
EG & G Corporation	1 E.E., 1 E.P.
Emerson Electric Company	1 M.E.
Fabricast Manufacturing Company	1 M.E.
Factory Mutual Insurance Company	1 C.E.
Fairchild Semiconductor	1 E.E.
Farinon Electric	1 E.E.
Allen E. Fehr Construction Engineers	1 C.E.
Florida State University	1 E.P.
FMC Corporation	1 G.E.
Ford Motor Company	1 E.E., 1 E.M., 1 I.E.
Gardner Denver	1 M.E.
General Motors: (3)	
Chevrolet Division	2 M.E.
Guide Lamp Division	1 Ceram. E.
General American Transportation Company	1 A.A.E.
General Dynamics Corporation	1 A.A.E.
General Electric Company	3 E.E., 1 E.P., 1 M.E., 1 Met.E.
General Foods	1 C.E.
General Radio	2 E.E.
General Time Company	1 E.E.
Georgia Department of Highways	1 C.E.
Global Systems	1 M.E.
Goodbody Company	1 G.E.
Goodyear Aerospace Corporation	1 E.E.
GPE Controls Incorporated	1 E.E.
Hallicrafters	1 E.E.
Hamilton Standard	1 E.E.
Walter E. Hanson Company	2 C.E.
Harper Wyman Company	1 M.E.
Honeywell Incorporated	1 E.E.
Hughart Buildings Systems, Incorporated	1 C.E.
Hughes Aircraft Company	2 E.E.
Hume, Clement, Hume & Lee	1 G.E.
W. E. Hutton Company	1 I.E.
I/O Com, Incorporated	1 E.E.
I.I.T. Research	1 E.E.
Illinois Division of Highways	11 C.E.
Illinois Water Survey	1 C.E., 1 G.E.
Illinois Water Treatment Company	1 C.E.
Inland Steel Corporation	1 E.M., 1 Met.E.

Integral Process Systems, Incorporated  
I.B.M.

International Harvester Company  
International Telephone & Telegraph  
Interface Devices

Jacobi Systems  
Jamesbury Corporation

Jet Propulsion Laboratory  
Johnson-Klein, Incorporated

Jordan-Rotheiser Company  
Joy Manufacturing Company

Kansas State University  
Koppers Incorporated

Kraft Foods  
Lear Siegler Incorporated

Lettvin & Gerstman  
Lockheed Missile & Space

Loyola University  
LTV Electrosystems

Magnavox Corporation  
Marchand Electronic Laboratory

Marshall Data Systems  
Martin-Marietta

Massachusetts Bureau of Planning  
Massachusetts Institute of Technology

Mautz & Oren, Incorporated  
McDonnell-Douglas: (15)

Huntington Beach, California  
Long Beach, California  
St. Louis, Missouri  
Santa Monica, California  
Titusville, Florida

Midwest Material Company  
Miller Davis Company

Minnesota Mining & Manufacturing Company  
Mississippi Valley Structural Steel Company

Missouri Public Service Commission  
Monsanto Chemical Company

Motorola, Incorporated  
Mullett Associates

Murphy & Miller, Incorporated  
Nalco Chemical Company

NASA Electronics Research Center  
NASA Lewis Research Center

National Accelerator Laboratory

1 M.E.  
1 A.A.E., 1 C.E., 8 E.E., 2 E.P., 1 M.E.  
2 Ag.E., 1 E.E., 1 G.E., 3 M.E.

2 E.E.  
1 M.E.

1 E.E.  
1 A.A.E.

1 E.E.  
1 C.E.

1 I.E.  
1 M.E.

1 Ag.E.  
1 C.E.

1 M.E.  
1 M.E.

1 E.E.  
1 A.A.E., 1 E.E.

1 C.E.  
3 E.E.

1 E.E., 2 M.E.  
1 E.E.

1 E.E.  
1 Ag.E., 1 E.E.

1 C.E.  
1 E.P.

1 C.E.

2 A.A.E.  
1 G.E.

3 A.A.E., 1 Ceram.E., 3 E.E., 2 E.M., 1 M.E.  
1 M.E.

1 E.E.  
1 C.E.

1 C.E.  
1 Ceram.E.

1 Ag.E.  
1 C.E.

1 I.E.  
2 E.E., 1 M.E., 1 Met.E.

1 E.E.  
1 M.E.

2 Ceram.E.  
1 E.E.

1 Ag.E., 1 E.M.  
1 E.P.

National Bureau of Standards	1 E.E.
National Gas Pipeline Company	1 E.E.
New York State Conservation Department	1 C.E.
L. H. Niems & Associates	1 C.E.
North American Aviation Autonetics	4 E.E.
North Essex Community College	1 E.E.
Northern Illinois Water Company	1 C.E.
Northrop Corporation	1 E.E., 1 E.P.
Nortown Travel Agency	1 I.E.
Nuclear Chicago	1 E.E.
Nussbaumer & Clarke, Incorporated	1 C.E.
Ohio College of Applied Science	1 M.E.
Ohio State University	1 E.P.
Operations Research, Incorporated	1 E.E.
Outboard Marine Corporation	1 M.E.
Owens-Illinois, Incorporated	1 Ceram.E.
Panduit Corporation	1 M.E.
Peerless Instrument Company	1 E.E.
Peoples Gas, Light & Coke Company	1 M.E.
PHI Computer Service	1 M.E.
Philco Ford	1 E.E.
Pioneer Electric	1 E.E.
Potter Brumfield Division AME	1 E.E.
Powers Regulator	1 G.E.
Powers Willis & Associates	1 C.E.
PPG Industries	2 Ceram.E., 2 M.E.
Pratt & Whitney Aircraft Company	2 A.A.E., 1 M.E.
Preferred Builders	1 C.E.
Procter & Gamble	1 M.E.
Purdue University	1 Ag.E.
Putnam Publishing Company	1 M.E.
Radiation Incorporated	2 E.E.
Rand Teleprocessing Company	1 E.P.
Raylance, Abrams, Kruger, Berdo & Kaul	1 E.E.
Raytheon Corporation	3 E.E.
Reasor Corporation	1 M.E.
H. H. Robertson Company	1 Ceram.E.
Rohr Corporation	1 A.A.E.
Rucker Company	1 I.E.
Sanders Associates	1 A.A.E.
Sangamo Electric Company	1 E.E.
Sargent & Lundy	2 M.E.
Walter Scholer & Associates	1 E.E.
SCM Corporation	1 E.E.
Self Employed - Farming	1 Ag.E.



Shannon & Wilson Incorporated	1 C.E.
Shasta County Department of Water Resources	1 C.E.
Shell Oil Company	1 E.E.
Shell Pipeline Company	1 E.E.
Signode Corporation	1 M.E.
Singer Company	1 M.E.
Sivyer Steel Casting Company	1 C.E.
A. O. Smith Corporation	1 Ag.E., 1 I.E.
Specialty Contracting Company	1 C.E.
Sperry Flight Systems	1 E.P.
Stanford University	1 E.E.
Stearns-Roger Corporation	1 M.E.
John F. Steffen Associates	1 M.E.
Sunbeam Corporation	1 E.E.
Swift Agricultural Chemical Corporation	1 C.E.
Swift Henke & Company	1 M.E.
Toni Company	1 G.E.
Torrington Company	1 I.E.
Trane Company	2 M.E.
Tri-County Tire & Camper Company	1 Ag.E.
Tri-onics, Incorporated	1 E.E.
TRW Systems	1 A.A.E., 1 E.E., 2 E.P., 2 M.E.
Turner Construction Company	1 Ag.E., 1 I.E.
U.S. Air Force - Wright Patterson Air Force Base	1 E.E.
U.S. Army - Corps of Engineers	1 C.E.
U.S. Army - Production Equipment Agency	1 G.E.
U.S. Department of Defense	1 E.E.
U.S. Department of Interior	1 G.E.
U.S. Civil Engineering Laboratory	1 C.E.
U.S. Naval Ordnance Laboratory	1 M.E.
U.S. Naval Ships Engineering Center	1 E.E.
U.S. Soil Conservation Service	1 Ag.E., 1 C.E.
U.S. Gypsum Company	1 M.E.
Uarco Incorporated	1 M.E.
Union Carbide Corporation	1 E.E.
Union County Technical Institute (New Jersey)	1 M.E.
Union Oil Company	1 Mining E.
United Air Lines	1 A.A.E., 1 E.E.
U.S. Steel Corporation	1 Met.E.
University of Illinois	1 A.A.E., 1 C.E., 2 E.E., 1 E.M., 1 E.P.
University of Texas	1 C.E.
Univac	1 E.E.
C. R. Velzy & Associates, Incorporated	1 C.E.
Victor Comptometer Corporation	1 E.E.
Washington University	1 M.E.

Wes-Cor Corporation  
Western Airlines  
Westinghouse Electric Corporation  
Williams & Burrows, Incorporated  
Wolfe, Hubbard, Leydig, Voit & Osaww  
Woodward Governor Corporation  
J. L. Wroan & Sons, Incorporated  
Wyman-Gordon Company  
Xerox Data Systems  
Zenith Radio

1 E.E.  
1 A.A.E.  
1 C.E., 4 E.E., 1 E.P., 1 M.E.  
1 C.E.  
1 M.E.  
1 E.P.  
2 C.E.  
1 M.E.  
1 E.E., 1 E.P., 1 M.E.  
1 E.E.

PRESENT GEOGRAPHIC LOCATION OF 1960 ENGINEERING GRADUATES

Location	All Engineers	Percent	Geographic Location 1960	Aero. E.	Ag. E.	Ceram. E.	Civil E.	E. E.	Eng. Mech.	Eng. Phys.	Gen. E.	I. E.	M. E.	Met. E.	Mining E.
Illinois	153	36.8%	41.8%	4	11	2	40	31	2	5	10	7	38	1	2
Chicago & Suburbs	79														
Outside Chicago	74														
California	61	14.7%	10.1%	9	-	1	7	25	1	7	4	-	7	-	-
Missouri	19	4.6%	4.4%	3	-	3	2	5	2	-	-	-	4	-	-
Massachusetts	16	3.8%	2.2%	2	-	-	1	10	-	1	-	-	1	1	-
Ohio	16	3.8%	2.6%	1	-	1	-	4	1	1	1	-	6	1	-
New York	15	3.6%	3.7%	-	-	-	3	8	-	-	1	-	3	-	-
Indiana	14	3.4%	6.0%	-	1	2	-	7	1	-	-	-	2	1	-
Pennsylvania	11	2.6%	4.3%	-	-	-	3	2	-	2	-	-	3	1	-
New Jersey	10	2.4%	1.7%	-	-	1	-	4	-	2	-	1	2	-	-
Michigan	9	2.2%	3.1%	-	-	-	4	1	1	-	-	-	3	-	-
Iowa	8	1.9%	1.7%	-	1	-	1	2	-	-	-	2	2	-	-
Washington (state)	8	1.9%	1.4%	1	-	2	1	2	-	-	1	-	1	-	-
Connecticut	7	1.8%	2.6%	2	-	-	-	2	-	-	-	1	2	-	-
Florida	7	1.8%	2.9%	-	-	-	-	4	-	2	-	-	1	-	-
Minnesota	7	1.8%	1.2%	-	-	1	2	1	-	1	1	1	-	-	-
Texas	7	1.8%	1.2%	-	-	-	1	4	-	-	-	-	1	-	1
Wisconsin	7	1.8%	2.9%	-	-	-	2	1	-	-	-	-	3	1	-
Maryland	6	1.4%	.7%	-	-	-	-	5	-	-	-	-	1	-	-
Arizona	5	1.2%	.2%	-	-	-	-	2	-	1	-	-	-	2	-
Colorado	5	1.2%	.7%	-	1	-	1	2	-	-	-	-	1	-	-
Oklahoma	3	.7%	.2%	-	-	-	2	-	-	-	-	-	1	-	-
Kentucky	3	.7%	.2%	-	-	-	-	2	-	-	-	1	-	-	-
Washington, D.C.	3	.7%	.7%	1	-	-	-	2	-	-	-	-	-	-	-
North Carolina	2	.5%	.5%	-	-	-	-	2	-	-	-	-	-	-	-
Tennessee	2	.5%	.2%	-	-	-	1	-	-	-	1	-	-	-	-
Alabama	1	.2%		1	-	-	-	-	-	-	-	-	-	-	-
Delaware	1	.2%	.5%	-	-	-	-	-	-	-	-	-	1	-	-
Georgia	1	.2%		-	-	-	1	-	-	-	-	-	-	-	-
Hawaii	1	.2%		-	-	-	1	-	-	-	-	-	-	-	-
Kansas	1	.2%		-	1	-	-	-	-	-	-	-	-	-	-
Louisiana	1	.2%	.7%	-	-	-	1	-	-	-	-	-	-	-	-
New Hampshire	1	.2%		1	-	-	-	-	-	-	-	-	-	-	-

(Continued on following page)

## PRESENT GEOGRAPHIC LOCATION OF 1960 ENGINEERING GRADUATES (Continued)

Location	All Engineers	Percent	Geographic Location 1960	Aero E.	Ag. E.	Ceram. E.	Civil E.	E. E.	Eng. Mech.	Eng. Phys.	Gen. E.	I. E.	M. E.	Met. E.	Mining E.
New Mexico	1	.2%	.5%	-	-	-	1	-	-	-	-	-	-	-	-
Nevada	1	.2%		-	-	-	-	-	-	1	-	-	-	-	-
South Carolina	1	.2%	.2%	-	-	-	-	-	-	-	-	1	-	-	-
Virginia	1	.2%	.2%	-	1	-	-	-	-	-	-	-	-	-	-
West Virginia	1	.2%	.2%	-	-	-	-	1	-	-	-	-	-	-	-
Utah			.5%												
Totals	416	100.0%		25	16	13	75	129	8	23	19	14	83	8	3

SIZE OF ORGANIZATIONS IN WHICH THE 1960 GRADUATES ARE NOW EMPLOYED

	All Engineers	Aero E.	Ag. E.	Ceram E.	Civil E.	E. E.	Eng. Mech.	Eng. Phys.	Gen. E.	I. E.	M. E.	Met. E.	Min. E.
Total Employed	416	25	16	13	75	129	8	23	19	14	83	8	3
0 - 50 Employees	50 12.0% \$1655.	1 4.0% \$3500.	2 12.5% \$ 775.	1 7.7% \$1700.	17 22.7% \$1365.	10 7.8% \$1713.	2 25.0% \$2000.	1 4.3% \$1500.	3 15.8% \$2000.	3 21.4% \$1383.	10 12.0% \$2001	- - -	- - -
51 - 150 Employees	29 6.9% \$1393.	- - -	1 6.3% \$1040.	- - -	11 14.7% \$1508.	9 6.9% \$1422.	- - -	- - -	3 15.8% \$1273.	1 7.1% \$1000.	4 4.8% \$1289.	- - -	- - -
151 - 500 Employees	35 8.4% \$1305.	1 4.0% \$1250.	1 6.3% \$1000.	1 7.7% \$1355.	12 16.0% \$1337.	6 4.7% \$1326.	- - -	2 8.7% \$1265.	- - -	3 21.4% \$1139.	8 9.6% \$1377.	1 12.5% \$1100.	- - -
501-5000 Employees	118 28.4% \$1387.	7 28.0% \$1470.	6 37.4% \$1180.	4 30.8% \$1363.	18 24.0% \$1359.	43 33.3% \$1446.	1 12.5% \$1635.	6 26.1% \$1267.	4 21.1% \$1468.	1 7.1% \$1200.	25 30.1% \$1364.	1 12.5% \$1400.	2 66.7% \$1175.
5001- 10,000 Employees	36 8.7% \$1410.	2 8.0% \$1350.	1 6.3% \$1270.	- - -	5 6.6% \$1551.	15 11.6% \$1480.	- - -	- - -	1 5.3% \$1300.	2 14.3% \$1342.	9 10.9% \$1307.	1 12.5% \$1088.	- - -
Over 10,000 Employees	148 35.6% \$1390.	14 56.0% \$1388.	5 31.2% \$1282.	7 53.8% \$1321.	12 16.0% \$1225.	46 35.7% \$1431.	5 62.5% \$1424.	14 60.9% \$1505.	8 42.0% \$1557.	4 28.7% \$1397.	27 32.6% \$1301.	5 62.5% \$1508.	1 33.3% \$1215.

## THE EMPLOYED 1960 GRADUATES ARE NOW EMPLOYED BY THE FOLLOWING TYPES OF COMPANIES

Type of Company <sup>1</sup>	All Engineers	Percent	1970 Average Salary	Aero. E.	Ag. E.	Ceram E.	Civil E.	E. E.	Eng. Mech.	Eng. Phys.	Gen. E.	I. E.	M. E.	Met. E.	Mining E.
Aircraft, Missile, & Space	57	13.8%	\$1367.	15 \$1409.	1 \$1270.	2 \$1452.	2 \$1675.	19 \$1312.	2 \$1313.	5 \$1399.	1 \$1300.	-	9 \$1268.	1 \$2000.	-
Electronics	45	10.9%	1511.	1 1670	-	-	-	35 1531.	-	2 1508.	-	1 \$1475.	5 1353.	1 1483.	-
Data Processing & Business Machines	32	7.7%	1605.	-	-	-	1 1200.	18 1664.	-	6 1764.	1 1400.	1 1265.	5 1391	-	-
Construction & Building	22	5.3%	1333.	-	1 1080.	1 1324.	16 1377.	-	-	-	-	-	3 1263.	1 1100.	-
Heavy Equipment	20	4.8%	1287.	-	6 1254.	-	1 1423.	1 1260.	-	-	1 1750.	1 1450.	8 1208.	1 1334.	1 1350.
State Government	20	4.8%	1221.	-	-	-	18 1216.	1 1133.	-	-	1 1400.	-	-	-	-
Consulting Engrs.	19	4.6%	1633.	-	-	-	12 1640.	3 1586.	-	-	-	1 1500.	3 1700.	-	-
Metal & Metal Products	17	4.1%	1280.	2 1275.	2 982.	-	1 1000.	1 1105.	2 1787.	-	1 1600.	2 1250.	3 1221.	3 1271.	-
Research Labora- tories	17	4.1%	1431.	2 1250.	-	1 1700.	1 1200.	9 1449.	1 2000.	2 1300.	-	-	1 1300.	-	-
Schools	17	4.1%	1222.	1 1150.	2 1382.	-	3 1288.	2 1175.	1 1511.	4 1008.	-	-	3 1237.	1 1400.	-
Chemical & Chem- ical Products	15	3.6%	1278.	-	-	3 1475.	1 1200.	3 1155.	-	-	2 1208.	1 1100.	5 1313.	-	-
Communications Equipment	15	3.6%	1368.	-	-	-	-	10 1439.	-	-	-	2 1101.	3 1309.	-	-
Federal Government	15	3.6%	1397.	-	2 1100.	-	3 1454.	5 1501.	1 1635.	-	2 1260.	-	2 1368.	-	-

(Continued on following page)



THE EMPLOYED 1960 GRADUATES ARE NOW EMPLOYED BY THE FOLLOWING TYPES OF COMPANIES (continued)

Type of Company <sup>1</sup>	All Engineers	Percent	1970 Average Salary	Aero. E.	Af. E.	Ceram. E.	Civil E.	E. E.	Eng. Mech.	Eng. Phys.	Gen. E.	I. E.	M. E.	Met. E.	Mining E.
Automobile & Automotive Equipment	11	2.6%	1482.	-	-	1 \$1104.	-	3 \$1377.	1 \$1408.	-	1 \$2900.	1 \$1400.	4 \$1340.	-	-
Public Utility	11	2.6%	1372.	-	-	-	2 1308.	4 1421	-	1 1600.	1 1425.	-	3 1258	-	-
Electrical Equipment	10	2.4%	1238.	-	-	-	-	4 1284.	-	1 1340.	-	1 1200.	3 1236.	-	1 1000.
Controls & Instrumentation	9	2.2%	1362.	-	-	-	-	4 1360.	-	1 1250.	1 1405.	-	3 1388.	-	-
City & County Governments	8	1.9%	1269.	-	-	-	7 1307.	1 1000.	-	-	-	-	-	-	-
Glass	7	1.7%	1257.	-	-	5 1260.	-	-	-	-	1 1300.	-	1 1200.	-	-
Heating & Air Conditioning	7	1.7%	1500.	-	-	-	-	-	-	-	1 1300.	-	6 1533.	-	-
Petroleum	7	1.7%	1324.	-	-	-	2 1400.	2 1443.	-	-	-	-	2 1184.	-	1 1215.
Law Firms	5	1.2%	2560.	1 3500.	-	-	-	2 1850.	-	-	1 2600.	-	1 3000.	-	-
Packaging Material & Equipment	5	1.2%	1201.	1 1110.	-	-	-	-	-	-	1 940.	-	3 1319.	-	-
Transportation	4	.10%	1457.	2 1775.	-	-	1 1001.	1 1280.	-	-	-	-	-	-	-
Food	3	.07%	1670.	-	-	-	1 1500.	-	-	-	-	-	2 1755.	-	-
Stock Brokers	3	.07%	2666.	-	-	-	-	-	-	-	-	1 1300.	2 3350.	-	-
Investment Banking & Finance	2	.05%	1715.	-	-	-	1 1580.	-	-	-	1 1850.	-	-	-	-

## THE EMPLOYED 1960 GRADUATES ARE NOW EMPLOYED BY THE FOLLOWING TYPES OF COMPANIES (continued)

Type of Company <sup>1</sup>	All Engineers	Percent	1970 Average Salary	Aero. E.	Ag. E.	Ceram. E.	Civil E.	E. E.	Eng. Mech.	Eng. Phys.	Gen. E.	I. E.	M. E.	Met. E.	Mining E.
Publishing & Printing	2	.05%	\$1339.	-	-	-	-	-	-	-	1 \$1346.	-	1 \$1333.	-	-
Rubber	2	.05%	1150.	-	1 1000.	-	-	-	-	1 1300.	-	-	-	-	-
Wholesale Distributor	2	.05%	1200.	-	-	-	-	-	-	-	-	1 1400.	1 1000.	-	-
Farming	1	.02%	550.	-	1 550.	-	-	-	-	-	-	-	-	-	-
Insurance	1	.02%	1865.	-	-	-	1 1865.	-	-	-	-	-	-	-	-
Management Consultants	1	.02%	2000.	-	-	-	-	-	-	-	1 2000.	-	-	-	-
Miscellaneous Merchandise	1	.02%	2333.	-	-	-	-	-	-	-	-	-	1 2333.	-	-
Paper	1	.02%	1350.	-	-	-	-	1 1350.	-	-	-	-	-	-	-
Travel Service	1	.02%	1250.	-	-	-	-	-	-	-	-	1 1250.	-	-	-
Water Treatment	1	.02%	1042.	-	-	-	1 1042.	-	-	-	-	-	-	-	-
Totals	416	100.00%		25	16	13	75	129	8	23	19	14	83	8	3

<sup>1</sup>The companies were classified by the respondents.

## PRESENT FIELD OF PRIMARY RESPONSIBILITY

Field <sup>1</sup>	All Engineers	Percent	1970 Average Salary	Aero.E.	Ag. E.	Ceram. E.	Civil E.	E. E.	Eng. Mech.	Eng. Phys.	Gen. E.	I. E.	M. E.	Met. E.	Mining E.
Management or Administration	98	23.57%	\$1529.	3 \$1423.	3 \$1076.	3 \$1478.	16 \$1565.	28 \$1670.	1 \$2000.	6 \$1852.	8 \$1612.	6 \$1265.	23 \$1366.	1 \$1088.	-
Design	63	15.15%	1285.	1 1400.	2 1160.	4 -	3 1201.	14 1346.	2 1367.	5 1447.	1 940.	-	14 1245.	1 2000.	-
Development	40	9.62%	1334.	7 1375.	2 1171.	4 1177.	3 1311.	14 1454.	-	2 1180.	-	-	8 1254.	-	-
Research	40	9.62%	1412.	3 1343.	3 1386.	2 1417.	2 1483.	14 1429.	4 1627.	5 1166.	1 1400.	1 1450.	3 1445.	2 1491.	-
Systems Engineering	34	8.17%	1360.	3 1441.	-	-	1 1400.	22 1364.	-	-	1 1346.	-	7 1310.	-	-
Sales	28	6.73%	1380.	-	4 1138.	1 1355.	1 1200.	6 1413.	-	-	3 1516.	2 1350.	9 1457.	1 1334.	1 1350.
Consulting	17	4.09%	1558.	-	-	-	8 1442.	4 1552.	-	-	1 2000.	1 1500.	3 1750.	-	-
Construction	16	3.85%	1288.	-	-	-	15 1301.	-	-	-	-	-	1 1100.	-	-
Field Engineering	12	2.88%	1274.	-	-	-	2 1336.	7 1307.	-	1 1250.	-	-	2 1111.	-	-
Production	11	2.64%	1188.	1 -	-	1 1300.	3 -	2 1268.	1 -	3 -	2 1258.	1 1018.	1 1120.	1 1100.	2 1107.
Teaching	10	2.40%	1158.	1 1150.	-	-	2 1300.	2 930.	1 1511.	3 1160.	-	-	1 980.	-	-
Service	7	1.68%	1379.	-	1 1200.	-	1 1225.	3 1535.	-	-	-	1 1400.	-	1 1225.	-
Company Owner	6	1.44%	2197.	-	-	-	1 2200.	1 2083.	-	-	-	-	3 2500.	1 1400.	-
Manufacturing	6	1.44%	1565.	-	-	1 1324.	-	-	-	-	1 1200.	2 1192.	2 2241.	-	-
Lawyer	5	1.20%	2480.	1 3500.	-	1 1800.	-	1 1500.	-	-	1 2600.	-	1 3000.	-	-
Data Processing	3	.72%	1298.	1 1191.	-	-	-	1 1330.	-	-	-	-	1 1375.	-	-
Research & Development	3	.72%	1700.	-	-	-	-	2 1950.	-	-	-	-	1 1200.	-	-

(continued on following page)

## PRESENT FIELD OF PRIMARY RESPONSIBILITY (continued)

Field <sup>1</sup>	All Engineers	Percent	1970 Average Salary	Aero. E.	Ag. E.	Ceram. E.	Civil E.	E. E.	Eng. Mech.	Eng. Phys.	Gen. E.	I. E.	M. E.	Met. E.	Mining E.
Testing	3	.72%	\$1317.	2 \$1317.	-	-	-	-	-	1 \$1450.	-	-	-	-	-
Cost & Economic Engineering	2	.48%	1300.	-	-	-	-	2 1300.	-	-	-	-	-	-	-
Operations Research	2	.48%	1540.	1 1500.	-	-	1 1580.	-	-	-	-	-	-	-	-
Pilot	2	.48%	1775.	2 1775.	-	-	-	-	-	-	-	-	-	-	-
Planning	2	.48%	1440.	-	-	-	2 1440.	-	-	-	-	-	-	-	-
Purchasing	2	.48%	1184.	-	-	-	-	1 1209.	-	-	-	-	1 1160.	-	-
Accounting	1	.24%	1210.	-	-	-	1 1210.	-	-	-	-	-	-	-	-
Maintenance	1	.24%	1090.	-	-	-	-	-	-	-	-	-	1 1090.	-	-
Plant Engineering	1	.24%	1195.	-	-	-	-	-	-	-	-	-	1 1195.	-	-
Self-Employed	1	.24%	550.	-	1 550.	-	-	-	-	-	-	-	-	-	-
Totals	416	100.00%		25	16	13	75	129	8	23	19	14	83	8	3

<sup>1</sup>Field of responsibility was named by the respondents.

PRESENT LEVEL OF RESPONSIBILITY

	All Engineers	Supervise a Small Group	Individual in a Group	Manage Major Group or Department	Top Executive	Plant Manager or Superinten- dent	Individual in Private Practice	Branch Manager
All Engineers Percent Average Salary	416	150 36.06%	147 35.34% \$1315.	71 17.07% \$1514.	23 5.53% \$2090.	12 2.88% \$1258.	10 2.40% \$1840.	3 .72% \$2135.
Aero. & Astro. Eng.	25	12 48.00% 1415.	11 44.00% 1363.	1 4.00% 1700.	1 4.00% 3500.	- - -	- - -	- - -
Ag. E.	16	6 37.50% 1256.	6 37.50% 1151.	2 12.50% 1180.	- - -	- - -	2 12.50% 775.	- - -
Ceram. E.	13	5 38.46% 1430.	4 30.77% 1376.	3 23.08% 1388.	- - -	1 7.69% 935.	- - -	- - -
Civil E.	75	33 44.00% 1228.	17 22.67% 1292.	16 21.33% 1496.	5 6.67% 2200.	2 2.67% 1050.	1 1.33% 2000.	1 1.33% 1250.
E. E.	129	47 36.43% 1377.	48 37.21% 1327.	22 17.05% 1640.	6 4.65% 1961.	3 2.33% 1460.	2 1.55% 1850.	1 .78% 3750.
Eng. Mech.	8	2 25.00% 1543.	5 62.50% 1534.	- - -	1 12.50% 2000.	- - -	- - -	- - -
Eng. Phys.	23	9 39.12% 1416.	11 47.83% 1383.	2 8.70% 1628.	1 4.35% 1500.	- - -	- - -	- - -
Gen. E.	19	2 10.53% 1260.	4 42.11% 1291.	4 21.05% 1462.	1 5.26% 2900.	- - -	3 15.79% 2150.	1 5.26% 1405.
I.E.	14	2 14.29% 1209.	3 21.43% 1311.	4 28.56% 1310.	2 14.29% 1375.	3 21.43% 1233.	- - -	- - -
M.E.	83	27 32.54% 1337.	30 36.14% 1263.	15 18.07% 1456.	6 7.23% 2111.	3 3.61% 1330.	2 2.41% 2350.	- - -
Met. E.	8	4 50.00% 1282.	2 25.00% 1450.	2 25.00% 1550.	- - -	- - -	- - -	- - -
Mining E.	3	1 33.33% 1350.	2 66.67% 1107.	- - -	- - -	- - -	- - -	- - -

HOW MANY ENGINEERS AND SCIENTISTS WORK IN THE ORGANIZATIONAL UNIT  
TO WHICH YOU BELONG IN YOUR CURRENT MAJOR POSITION?

	All Engineers	Aero. E.	Ag. E.	Ceram. E.	Civil E.	E. E.	Eng. Mech.	Eng. Phys.	Gen. E.	I. E.	M. E.	Met. E.	Mining E.
None	43 10.34%	2 4.65%	2 4.65%	1 2.33%	9 20.93%	9 20.93%	1 2.33%	1 2.33%	4 9.30%	6 13.95%	7 16.27%	1 2.33%	- -
1-3	60 14.43%	1 1.67%	3 5.00%	7 11.67%	12 20.00%	11 18.33%	1 1.67%	1 1.67%	5 8.33%	2 3.33%	16 26.67%	- -	1 1.67%
4-10	112 26.92%	9 8.04%	5 4.46%	2 1.79%	23 20.54%	32 28.56%	1 .89%	9 8.04%	3 2.68%	3 2.68%	23 20.54%	1 .89%	1 .89%
11-20	74 17.79%	6 8.11%	1 1.35%	- -	15 20.27%	27 36.49%	1 1.35%	6 8.11%	3 4.05%	1 1.35%	13 17.57%	1 1.35%	- -
21-50	61 14.66%	3 4.92%	2 3.28%	2 3.28%	9 14.75%	24 39.34%	1 1.64%	2 3.28%	2 3.28%	1 1.64%	10 16.39%	4 6.56%	1 1.64%
51-100	38 9.13%	2 5.26%	1 2.63%	- -	6 15.79%	13 34.22%	2 5.26%	4 10.53%	1 2.63%	1 2.63%	8 21.05%	- -	- -
101-300	18 4.33%	1 5.56%	- -	- -	1 5.56%	8 44.43%	- -	- -	1 5.56%	- -	6 33.33%	1 5.56%	- -
Over 300	10 2.40%	1 10.00%	2 20.00%	1 10.00%	- -	5 50.00%	1 10.00%	- -	- -	- -	- -	- -	- -
Totals	416	25	16	13	75	129	8	23	19	14	83	8	3



# QUESTIONS CONCERNING PRESENT POSITION AND ITS RELATION TO THEIR UNDERGRADUATE DEGREE

QUESTION: To hold your present position is it important for you to have an engineering degree?

Yes	358	86.06%
No	58	13.94%
	<u>416</u>	

QUESTION: How much knowledge and skill related to your undergraduate degree do you apply in your present position?

Most or all	122	29.33%
Some	200	48.08%
Very little	85	20.43%
None	9	2.16%
	<u>416</u>	

QUESTION: On the average, how many hours each week do you work on your job?

30 hours or less	3	.72%
31-40 hours	79	18.99%
41-45 hours	169	40.63%
46-50	111	26.68%
51 or more hours	54	12.98%
	<u>416</u>	

QUESTION: If you have not received an advanced degree and are not working toward one, do you feel that this has been a limiting factor in progress with your company and in your work?

Yes	27
No	219

Only 246 of the respondents answered this question.

The 27 respondents who answered yes gave the following reasons:

Aero. & Astro. Eng.

1. "Advancement in management field appears more rapid." (continued on following page)

## QUESTIONS CONCERNING PRESENT POSITION AND ITS RELATION TO THEIR UNDERGRADUATE DEGREE (continued)

2. "Considerable emphasis is placed on degree - more than ability."
3. "Additional course work looks good on your resume."

Ceram. E.

1. No reason given
2. "Academic self improvement is expected."

Civil E.

1. No reason given
2. "M.B.A. would increase opportunity for advancement outside the engineering department."
3. "Had fewer advancement possibilities."

E. E.

1. No reason given (2)
2. "M.B.A. would have helped toward management."
3. "Other positions may have been opened to me."
4. "Only to the extent that advanced degrees earn you more money."
5. "Greater ease in obtaining promotions."
6. "Would increase my value to company, would have received transfer offers to work on new programs."
7. "More and more engineers are receiving M.S. degrees."
8. "Salary restrictions by degree level."

G. E.

1. "A Ph.D. opens doors that are closed to me."

M. E.

1. No reason given
2. "Continual education is a must to keep advancing."
3. "Need for still broader understanding."
4. "Ph.D. is the 'license' necessary for engineering education assignments."
5. "Some who received them advanced faster."
6. "Management feels that only people who continue in school have incentive."
7. "Lack of knowledge of basic business principle."
8. "For supervision in engineering company stresses M.B.A. after B.S. in engineering."

I. E.

1. "Top management is becoming increasingly complex."

# QUESTIONS CONCERNING CURRICULUM

QUESTION: Rank in order, the value (1, 2, 3 etc.) of additional degrees which you feel would be the most valuable to you.

Order of Importance

Degree	1st	2nd	3rd	4th	5th	6th
M.B.A.	169 50.60%	40 11.97%	17 5.09%	2 .60%	-	3 .90%
M.S. in Original Field	48 14.38%	45 13.47%	30 8.98%	6 1.80%	4 1.20%	-
M.S. in Another Technical Field	26 7.78%	46 13.77%	59 17.66%	3 .90%	2 .60%	5 1.50%
Law	20 5.99%	51 15.27%	28 8.38%	1 .30%	-	2 .60%
Ph.D. in Original Field	19 5.69%	23 6.89%	24 7.19%	6 1.80%	4 1.20%	3 .90%
Ph.D. in Another Technical Field	26 7.78%	18 5.39%	18 5.39%	2 .60%	6 1.80%	6 1.80%
Other (no degree mentioned)	26 7.78%	5 1.50%	19 5.69%	-	1 .30%	2 .60%
No Choice Listed	-	106 31.74%	139 41.62%	314 94.00%	317 94.90%	313 93.70%
Totals	334 <sup>1</sup>	334	334	334	334	334

<sup>1</sup>82 respondents did not answer this question.

QUESTION: If you had it to do all over again would you choose: (8 respondents did not answer this question.)

217	53.19%	a specialized undergraduate engineering curriculum (e.g., M.E., E.E., etc.)
66	16.18%	a common undergraduate engineering curriculum (no specialization)
56	13.73%	another type of undergraduate professional curriculum (e.g., pre-law, pre-medicine, etc.)
31	7.60%	a business administration curriculum
22	5.39%	another type of curriculum in mathematics or the physical sciences (e.g., physics, chemistry)
4	.98%	a liberal arts curriculum
12 <sup>1</sup>	2.94%	other
408		

(continued on following page)

## QUESTIONS CONCERNING CURRICULUM (continued)

<sup>1</sup>5 did not identify other curriculum; 2 engineering and business administration combined; 1 engineering followed by medical graduate program; 1 4-year technology program rather than engineering; 1 B.S.E.E. plus general math and physics plus business rather than specialized engineering courses; 1 undecided; 1 art.

Because of the controversy concerning campus recruiting over the past few years, the following question was asked:  
 "Do you feel that the University should provide a service such as that offered by the Placement Office."

Yes	394	94.72%
No	15	3.61%
Did not answer	7	1.68%

## MILITARY SERVICE SERVED AFTER GRADUATION IN 1960 AND ITS EFFECT ON 1970 SALARY

		Aero. F.	Ag. E.	Ceram. E.	Civil E.	E. E.	Eng. Mech.	Eng. Phys.	Gen. E.	I. E.	M. E.	Met. E.	Mining E.
Total Employed	416	25	16	13	75	129	8	23	19	14	83	8	3
No Military Service	320 76.92% \$1428.	22 88.00% \$1435.	14 87.50% \$1131.	10 76.92% \$1391.	48 64.00% \$1418.	109 84.50% \$1465.	7 87.50% \$1545.	19 82.61% \$1414.	8 42.11% \$1825.	11 78.57% \$1328.	64 77.11% \$1399.	6 75.00% \$1469.	2 66.67% \$1282.
6 Months or Less	39 9.38% 1446.	- - -	2 12.50% 1254.	- - -	9 12.00% 1361.	12 9.30% 1387.	1 12.50% 1327.	1 4.35% 2170.	3 15.79% 1307.	1 7.14% 1185.	9 10.83% 1687.	1 12.50% 1225.	- - -
1 Year	4 .96% 1454.	- - -	- - -	- - -	2 2.67% 1336.	2 1.55% 1572.	- - -	- - -	- - -	- - -	- - -	- - -	- - -
2 or More Years	53 12.74% 1317.	3 12.00% 2083.	- - -	3 23.08% 1279.	16 21.33% 1273.	6 4.65% 1331.	- - -	3 13.04% 1223.	8 42.11% 1366.	2 14.29% 1125.	10 12.05% 1245.	1 12.50% 1088.	1 33.33% 1000.







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UNIVERSITY OF ILLINOIS-URBANA